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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,897	02/09/2000	Shunpei Yamazaki	SEL 161	3195

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EXAMINER

MISLEH, JUSTIN P

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/500,897

Applicant(s)

YAMAZAKI ET AL.

Examiner

Justin P. Misleh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/5/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5 July 2005 has been entered.

Response to Arguments

2. Applicant's arguments filed 5 July 2005 have been fully considered but they are not persuasive; Applicant's arguments with respect to Claims 17 –31 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant argues, “Takahara appears to disclose that an optical coupling agent 691 (water, etc.) is filled between a microlens 641 and a counter substrate 11 over LCD display elements 21 and 22,” hence, Takahara does not disclose, “the substrate and the lens are bonded with an adhesive.”

The Examiner disagrees with Applicant's position. As stated in column 54 (lines 44 – 55) and 56 (lines 5 – 15), the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a) and the lens (microlens 641) are bonded with an acrylic resin (optical coupling agent 691). Acrylic resin, as defined by technical dictionaries is well-known adhesive.

4. Applicant further argues, "Takahara fails to disclose the lens for magnifying an image of an object displayed by the ... display."

The Examiner disagrees with Applicant's position. Takahara clearly disclose, as stated in column 56 (lines 6 – 35), adjusting focal distance of the microlens (641) according to various manufacturing techniques. The focal distance of the microlens (641) establishes the display area of the display – the shorter the focal distance, the larger the display area. The magnification factor of the image of an object can be found by dividing the actual focal distance of the microlens (641) by a focal distance of a standard microlens. Therefore, Takahara actually discloses the lens for magnifying an image of an object displayed by the display.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1 – 27** are rejected under 35 U.S.C. 102(e) as being anticipated by Takahara (US 6 219 113 B1).

7. For **Claim 1**, Takahara discloses, as shown in figures 2a, 2b, 11, 12, 64 – 69, 96 – 105, and 218 – 225 and as stated in columns 3 (lines 33 – 41), 4 (lines 1 – 14), 54 – 57, 122, and 124, a electroluminescence display device (see figures 218 – 225) comprising:

a substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a);

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an LCD display element (21 and 22 from figures 2a and 2b) formed over the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a); and

a lens (microlens 641) formed over the LCD display element (21 and 22 from figures 2a and 2b), wherein the lens (microlens 641) has a spherical surface to which the LCD display element emits a light (see figures 65, 66a, 97, 102, and 111) and

wherein the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a) and the lens (microlens 641) are bonded with an adhesive (see explanation below).

While Takahara discloses the viewfinder (see figures 218 – 225) with an LCD display panel (22), Takahara also discloses, as stated in columns 23 (lines 23 – 33), 30 (lines 51 – 65), 58 (lines 37 – 42), 100 (lines 44 – 58), 126 (line 60) – 127 (line 4), and 130 (lines 17 – 34), that the LCD display may be replaced by an organic electroluminescence display element.

As stated in column 54 (lines 44 – 55) and 56 (lines 5 – 15), the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a) and the lens (microlens 641) are bonded with an acrylic resin (optical coupling agent 691). Acrylic resin, as defined by technical dictionaries is well-known adhesive.

8. For **Claim 5**, Takahara discloses, as shown in figures 2a, 2b, 11, 12, 64 – 69, 96 – 105, and 218 – 225 and as stated in columns 3 (lines 33 – 41), 4 (lines 1 – 14), 54 – 57, 122, and 124, an electroluminescence display device (see figures 218 – 225) comprising:

a substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a);

an LCD display element (21 and 22 from figures 2a and 2b) formed over the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a); and

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a lens (microlens 641) formed over the LCD display element (21 and 22 from figures 2a and 2b), wherein the lens (microlens 641) has a spherical surface to which the LCD display element emits a light (see figures 65, 66a, 97, 102, and 111), and

wherein the lens (microlens 641) magnifies an image of an object displayed by the LCD display element (see below for explanation).

While Takahara discloses the viewfinder (see figures 218 – 225) with an LCD display panel (22), Takahara also discloses, as stated in columns 23 (lines 23 – 33), 30 (lines 51 – 65), 58 (lines 37 – 42), 100 (lines 44 – 58), 126 (line 60) – 127 (line 4), and 130 (lines 17 – 34), that the LCD display may be replaced by an organic electroluminescence display element.

Furthermore, as stated in column 56 (lines 6 – 35), Takahara discloses adjusting focal distance of the microlens (641) according to various manufacturing techniques. The focal distance of the microlens (641) establishes the display area of the display – the shorter the focal distance, the larger the display area. The magnification factor of the image of an object can be found by dividing the actual focal distance of the microlens (641) by a focal distance of a standard microlens.

9. For **Claim 9**, Takahara discloses, as shown in figures 2a, 2b, 11, 12, 64 – 69, 96 – 105, and 218 – 225 and as stated in columns 3 (lines 33 – 41), 4 (lines 1 – 14), 54 – 57, 122, and 124, an electroluminescence display device (see figures 218 – 225) comprising:

a substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a);

an LCD display element (21 and 22 from figures 2a and 2b) formed over the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a); and

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a lens (microlens 641) formed over the LCD display element (21 and 22 from figures 2a and 2b), wherein the lens (microlens 641) has a spherical surface to which the LCD display element emits a light (see figures 65, 66a, 97, 102, and 111), and

wherein the lens (microlens 641) magnifies an image of an object displayed by the LCD display element (see below for explanation) and projects the magnified image upon an of a user (see column 123, lines 1 – 16).

While Takahara discloses the viewfinder (see figures 218 – 225) with an LCD display panel (22), Takahara also discloses, as stated in columns 23 (lines 23 – 33), 30 (lines 51 – 65), 58 (lines 37 – 42), 100 (lines 44 – 58), 126 (line 60) – 127 (line 4), and 130 (lines 17 – 34), that the LCD display may be replaced by an organic electroluminescence display element.

Furthermore, as stated in column 56 (lines 6 – 35), Takahara discloses adjusting focal distance of the microlens (641) according to various manufacturing techniques. The focal distance of the microlens (641) establishes the display area of the display – the shorter the focal distance, the larger the display area. The magnification factor of the image of an object can be found by dividing the actual focal distance of the microlens (641) by a focal distance of a standard microlens.

10. For **Claim 13**, Takahara discloses, as shown in figures 2a, 2b, 11, 12, 64 – 69, 96 – 105, and 218 – 225 and as stated in columns 3 (lines 33 – 41), 4 (lines 1 – 14), 54 – 57, 122, and 124, a electroluminescence display device (see figures 218 – 225) comprising:

a substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a);

an LCD display element (21 and 22 from figures 2a and 2b) formed over the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a); and

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a lens (microlens 641) formed over the LCD display element (21 and 22 from figures 2a and 2b), wherein the lens (microlens 641) has a spherical surface to which the LCD display element emits a light (see figures 65, 66a, 97, 102, and 111), and

wherein the lens (microlens 641) magnifies an image of an object displayed by the LCD display element (see below for explanation) and projects the magnified image upon an of a user (see column 123, lines 1 – 16).

While Takahara discloses the viewfinder (see figures 218 – 225) with an LCD display panel (22), Takahara also discloses, as stated in columns 23 (lines 23 – 33), 30 (lines 51 – 65), 58 (lines 37 – 42), 100 (lines 44 – 58), 126 (line 60) – 127 (line 4), and 130 (lines 17 – 34), that the LCD display may be replaced by an inorganic electroluminescence display element.

Furthermore, as stated in column 56 (lines 6 – 35), Takahara discloses adjusting focal distance of the microlens (641) according to various manufacturing techniques. The focal distance of the microlens (641) establishes the display area of the display – the shorter the focal distance, the larger the display area. The magnification factor of the image of an object can be found by dividing the actual focal distance of the microlens (641) by a focal distance of a standard microlens.

11. As for **Claims 2, 6, 10, and 14**, Takahara discloses, as shown in figures 45 wherein said organic electroluminescence display element comprises plural thin film transistors ($T_{11} - T_{33}$) formed over the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a).

12. As for **Claims 3, 7, 11, and 15**, Takahara discloses, as shown in figures 54, 55, 119, and 124, wherein said organic electroluminescence display element comprises a pixel portion ($T_{11} -$

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T₃₃) and a driver circuit (491 and 492) formed over the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a).

13. As for **Claims 4, 8, 12, and 16**, Takahara discloses, as stated in column 122 (lines 37 – 43), said viewfinder is incorporated into a camera selected from the group consisting of a video camera and a digital camera.

14. As for **Claims 17 – 19**, Takahara discloses, as stated in column 54 (lines 44 – 55) and 56 (lines 5 – 15), wherein substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a) and the lens (microlens 641) are bonded with an acrylic resin (optical coupling agent 691). Acrylic resin, as defined by technical dictionaries is well-known adhesive.

15. As for **Claims 20 – 23**, Takahara discloses, as shown in figures 64, 65, and 66 – 69, wherein the lens (microlens 641) has at least one spherical surface. The claim language is written broadly enough such that the lens is not required to have ONLY a single spherical surface, rather AT LEAST one spherical surface.

16. As for **Claims 24 – 27**, Takahara discloses, as shown in figures 64, 65, and 66 – 69, wherein the lens (microlens 641) acts a cover member. The lens (microlens 641) acts a cover member because it covers the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 28 – 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahara (US 6 219 113 B1).

19. As for **Claims 28 – 31**, Takahara discloses, as shown in figures 64, 65, and 66 – 69, wherein the lens (microlens 641) acts a cover member, wherein the lens (microlens 641) acts a cover member because it covers the substrate (11 and 12 from figures 2a and 2b and 642 from figure 66a). Takahara does disclose wherein the cover member is at least a glass plate, which is one selected from the group of a glass, aluminum, stainless steel, FRP, PVF plate and Mylar, polyester, or acrylic film.

However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of providing a glass plate as a cover member for covering a substrate are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have providing a glass plate as a cover member for covering a substrate for advantage that glass is glass is durable, provides excellent optical quality, and can be laminated or toughened to provide additional strength.

Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Justin P Misleh whose telephone number is 571.272.7313. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

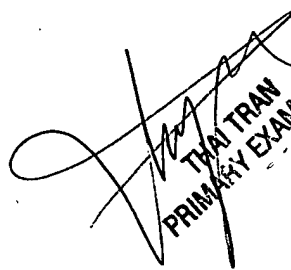
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Thai Q Tran can be reached on 571.272.7382. The fax phone number for the organization where this application or proceeding is assigned is 571.273.3000.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM

8 August 2005


THAI TRAN
PRIMARY EXAMINER